

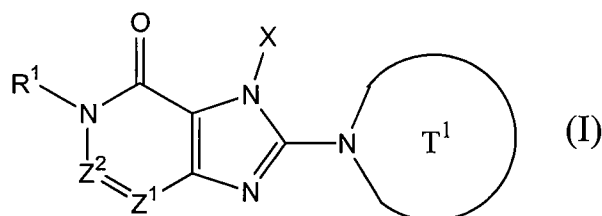
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-4 (Canceled)

5. (Previously Presented) A pharmaceutical agent comprising a dipeptidyl peptidase IV inhibitor and a biguanide agent in combination, wherein the dipeptidyl peptidase IV inhibitor is a compound represented by the following formula, or a salt or hydrate thereof,



(wherein,

T¹ represents a monocyclic or bicyclic 4- to 12-membered heterocyclic group containing one or two nitrogen atoms in the ring, that may have one or more substituents;

X represents a C₁₋₆ alkyl group which may have one or more substituents, a C₂₋₆ alkenyl group which may have one or more substituents, a C₂₋₆ alkynyl group which may have one or more substituents, a C₆₋₁₀ aryl group which may have one or more substituents, a 5 to 10-membered heteroaryl group which may have one or more substituents, a C₆₋₁₀ aryl C₁₋₆ alkyl group which may have one or more substituents, or a 5 to 10-membered heteroaryl C₁₋₆ alkyl group which may have one or more substituents;

Z¹ and Z² each independently represent a nitrogen atom or a group represented by the formula -CR²=;

R¹ and R² each independently represent a group according to the formula -A⁰-A¹-A²
(wherein

A⁰ represents a single bond or a C₁₋₆ alkylene group, which may have 1 to 3 substituents selected from group B consisting of the substituents described below;

A¹ represents a single bond, an oxygen atom, a sulfur atom, a sulfinyl group, a sulfonyl group, a carbonyl group, a group represented by the formula -O-CO-, a group represented by the formula -CO-O-, a group represented by the formula -NR^A-, a group represented by the formula -CO-NR^A-, a group represented by the formula -NR^A-CO-, a group represented by the formula -SO₂-NR^A-, or a group represented by the formula -NR^A-SO₂-;

A² and R^A each independently represent a hydrogen atom, a halogen atom, a cyano group, a C₁₋₆ alkyl group, a C₃₋₈ cycloalkyl group, a C₂₋₆ alkenyl group, a C₂₋₆ alkynyl group, C₆₋₁₀ aryl group, a 5 to 10-membered heteroaryl group, a 4 to 8-membered heterocyclic group, a 5 to 10-membered heteroaryl C₁₋₆ alkyl group, a C₆₋₁₀ aryl C₁₋₆ alkyl group, or a C₂₋₇ alkylcarbonyl group;

however, A² and R^A each independently may have 1 to 3 substituents selected from the substituent group B described below:

when Z² is a group represented by the formula -CR²=, R¹, and R² may in combination form a 5 to 7-membered ring;

except in cases where: [1] R¹ is a hydrogen atom; Z¹ is a nitrogen atom; and Z² is -CH=; and [2] Z¹ is a nitrogen atom; and Z² is -C(OH)=;

<Substituent group B>

Substituent group B represents the group consisting of: a hydroxyl group, a mercapto group, a cyano group, a nitro group, a halogen atom, a trifluoromethyl group, a C₁₋₆ alkyl group which may have one or more substituents, a C₃₋₈ cycloalkyl group, a C₂₋₆ alkenyl group, a C₂₋₆ alkynyl group, a C₆₋₁₀ aryl group, a 5 to 10-membered heteroaryl group, a 4 to 8-membered heterocyclic group, a C₁₋₆ alkoxy group, a C₁₋₆ alkylthio group, a group represented by the formula -SO₂-NR^{B1}-R^{B2}, a group represented by the formula -NR^{B1}-CO-R^{B2}, a group

represented by the formula $-NR^{B1}-R^{B2}$ (where R^{B1} and R^{B2} each independently represent a hydrogen atom or a C_{1-6} alkyl group), a group represented by the formula $-CO-R^{B3}$ (where R^{B3} represents a 4 to 8-membered heterocyclic group), a group represented by the formula $-CO-R^{B4}-R^{B5}$ and a group represented by the formula $-CH_2-CO-R^{B4}-R^{B5}$ (where R^{B4} represents a single bond, an oxygen atom, or a group represented by the formula $-NR^{B6}-$; R^{B5} and R^{B6} each independently represent a hydrogen atom, a C_{1-6} alkyl group, a C_{3-8} cycloalkyl group, a C_{2-6} alkenyl group, a C_{2-6} alkynyl group, a C_{6-10} aryl group, a 5 to 10-membered heteroaryl group, a 4 to 8-membered heterocyclic C_{1-6} alkyl group, a C_{6-10} aryl C_{16} alkyl group, or a 5 to 10-membered heteroaryl C_{1-6} alkyl group)).

6. (Original) The pharmaceutical agent according to claim 5, wherein T^1 is a piperazin-1-yl group or a 3-amino-piperidin-1-yl group.

7. (Original) The pharmaceutical agent according to claim 5, wherein T^1 is a piperazin-1-yl group.

8. (Previously Presented) The pharmaceutical agent according to claim 5, wherein X is a 3-methyl-2-buten-1-yl group, a 2-butyryl group, a benzyl group, or a 2-chlorophenyl group.

9. (Previously Presented) The pharmaceutical agent according to claim 5, wherein X is a 2-butyryl group.

10. (Previously Presented) The pharmaceutical agent according to claim 5, wherein,
 Z^1 is a nitrogen atom; and
 Z^2 is a group represented by the formula $-CR^2=$.

11. (Previously Presented) The pharmaceutical agent according to claim 5, wherein,

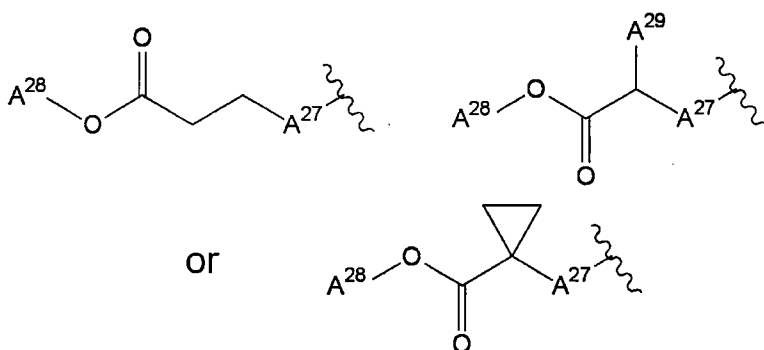
Z^2 is a nitrogen atom; and

Z^1 is a group represented by the formula $-CR^2=$.

12. (Previously Presented) The pharmaceutical agent according to claim 5, wherein R^1 is either a methyl group, a cyanobenzyl group, a fluorocyanobenzyl group, a phenethyl group, a 2-methoxyethyl group, or a 4-methoxycarbonylpyridin-2-yl group.

13. (Previously Presented) The pharmaceutical agent according to claim 5, wherein R^1 is a methyl group, or a 2-cyanobenzyl group.

14. (Previously Presented) The pharmaceutical agent according to claim 5, wherein R^2 is either a hydrogen atom, a cyano group, a methoxy group, a carbamoylphenyloxy group, or a group represented by the formula:



(where,

A^{27} represents an oxygen atom, a sulfur atom, or $-NH-$;

A^{28} and A^{29} each independently represent a hydrogen atom or a C_{1-6} alkyl group).

15. (Previously Presented) The pharmaceutical agent according to claim 5, wherein R^2 is a hydrogen atom, a cyano group, or a 2-carbamoylphenyloxy group.

16. (Original) The pharmaceutical agent according to claim 5, wherein the compound represented by formula (I) is any one compound selected from:

(1) 7-(2-butynyl)-2-cyano-1-methyl-8-(piperazin-1-yl)-1,7-dihydropurin-6-one;

- (2) 3-(2-butynyl)-5-methyl-2-(piperazin-1-yl)-3,5-dihydroimidazo[4,5-d]pyridazin-4-one;
- (3) 2-(3-aminopiperidin-1-yl)-3-(2-butynyl)-5-methyl-3,5-dihydroimidazo[4,5-d]pyridazin-4-one;
- (4) 2-[7-(2-butynyl)-1-methyl-6-oxo-8-(piperazin-1-yl)-6,7-dihydro-1H-purin-2-yloxy]benzamide;
- (5) 7-(2-butynyl)-1-(2-cyanobenzyl)-6-oxo-8-(piperazin-1-yl)-6,7-dihydro-1H-purine-2-carbonitrile; and
- (6) 2-[3-(2-butynyl)-4-oxo-2-(piperazin-1-yl)-3,4-dihydroimidazo[4,5-d]pyridazin-5-ylmethyl] benzonitrile;

or a salt or hydrate thereof.

Claims 17-23 (Canceled)

24. (Previously Presented) The pharmaceutical agent according to claim 5, wherein the biguanide agent is metformin.

25. (Previously Presented) The pharmaceutical agent according to claim 5, which is a preventive or therapeutic agent for a disease which is associated with active circulating GLP-1 and/or active circulating GLP-2.

26. (Original) The pharmaceutical agent according to claim 25, wherein the disease is at least any one selected from the group consisting of: diabetes, obesity, hyperlipidemia, and gastrointestinal diseases.

Claims 27-28 (Canceled)

29. (Withdrawn) A method for preventing or treating a disease which is associated with active circulating GLP-1 and/or active circulating GLP-2, which comprises administering the pharmaceutical agent according to claim 5 at an effective amount.

Claims 30-32 (Canceled)

33. (Withdrawn) A method for enhancing the effects of active circulating GLP-1 and/or active circulating GLP-2, which comprises using the pharmaceutical agent according to claim 5.

Claim 34 (Canceled)